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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975.342	10/11/2001	Michael Cheng	AUS920010685US1	9795
7590		12/14/2004	EXAMINER	
Duke W. Yee		ZHEN, LI B		
Carstens, Yee & Cahoon, LLP		ART UNIT		PAPER NUMBER
P.O. Box 802334		2126		
Dallas, TX 75380				

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/975,342

Applicant(s)

CHENG ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/14/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1 – 30 are pending in the current application.

***Claim Objections***

2. Claims 4 and 19 are objected to because of the following informalities:  
“converting step ad the binding step” [lines 1 – 2]. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 3 and 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 3 and 18 recite the limitation “the locating step” and “the locating means” in lines 1 – 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:  
  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
7. Claims 1 – 13 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

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8. Claims 1 – 13 are directed to method steps which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, collecting, forwarding, searching, attaching, redirecting, converting, binding, receiving, converting and serializing, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change “method” to “computer implemented method” in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 9, 11 – 13, 15, 24, 26 – 28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,269,378 to Quirt.**

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11. As to claim 9, Quirt teaches a method in a data processing system for obtaining object references, the method comprising:

receiving a request to for an object reference [When the Local Name Service 402 receives the message from the software object A 400; col. 10, lines 23 – 57], wherein the request includes a source name space path, and identification of a destination, and a destination name space path [When the Local Name Service 402 receives the message from the software object A 400 containing the fake reference, the Local Name Service checks whether the off-node Name Service 404 has responded to the off-node request; col. 10, lines 23 – 57];

searching a name space for the object reference using the source name space path [off-node Name Service 404 performs its search operation 416; col. 10, lines 29 – 30]; and

responsive to locating the object reference [off-node Name Service 404 sends back to the Local Name Service 402 message 418 with the reference to the software object B 406; col. 10, lines 31 – 33], sending the object reference to a destination using the identification of the destination [local Name Service 402 uses as its own identity in the locate message 414 the same fake object reference that it issued in the acknowledgement message 412 sent to the software object A 400. The Local Name Service 402 updates the corresponding record in its data structure 160; col. 10, lines 33 – 57], wherein the destination uses the destination name space path to bind the object reference [The Local Name Service 402 is now able to provide an immediate valid

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response to a future query for look-up of the formerly missing persistent name of B 406; col. 10, lines 35 – 50].

12. As to claims 11 and 12, Quirt teaches the identification of the destination is a universal resource locator and the request is a POST request [col. 11, lines 52 – 61].

13. As to claim 13, Quirt teaches converting the object reference to a standard common object request broker architecture object prior to sending the object reference to the destination [col. 11, lines 19 – 31].

14. As to claim 15, this is a system claim that corresponds to method claim 9; note the rejection to claim 9 above, which also meets this system claim.

15. As to claims 24 and 26 – 28, these are system claims that correspond to method claims 9 and 11 – 13; note the rejection to claims 9 and 11 – 13 above, which also meet these system claims.

16. As to claim 30, this is a product claim that corresponds to method claim 9; note the rejection to claim 9 above, which also meets this product claim.

***Claim Rejections - 35 USC § 103***

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17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1 – 8, 10, 14, 16 – 23, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quirt in view of U.S. Patent No. 6,633,923 to Kukura et al. [hereinafter Kukura].**

19. As to claim 1, Quirt teaches the invention substantially as claimed including a method in a data processing system for binding object references from a remote name space into a local name space, the method comprising:

collecting information to create a request to bind an object reference [software object in the software system registers with the Name Service by sending its persistent Name, software object reference and other relevant information to the Name Service in the form of a registration message; col. 8, lines 22 – 33];

forwarding the request to a source application server [software object 300 sends a registration message 308 to the Name Service requesting that a registration be made. The registration message 308 includes a scope parameter indicating that the registration is to be performed at a central level (in the Central Name Service, in the Local Name Service 302 and in the associated Cluster Name Service); col. 8, lines 40 – 48];

searching for the object reference in the remote name space [Name Service can perform remote searching to translate the persistent name to a suitable software object reference; col. 5, lines 10 – 18];

responsive to locating the object reference attaching the interoperable object reference to the request [Local Name Service 302 then sends a message 312 its associated Cluster Name Service 304; col. 8, lines 49 – 62];

redirecting the request to a destination application server [Local Name Service 302 then sends a message 312 its associated Cluster Name Service 304 requesting that the software object reference be registered; col. 8, lines 49 – 62]; and

binding the object reference into the local name space on the destination application server [Cluster Name Service 304 creates the same entry 314 in its table; col. 8, lines 49 – 62].

20. Although Quirt teaches the invention substantially as claimed, Quirt does not specifically teach serializing an object reference and converting a serialized interoperable object reference back to an object reference.

However, Kukura teaches serializing an object reference and converting a serialized interoperable object reference back to an object reference [Optimize the performance of marshaling and demarshaling (and therefore conversion to and from strings) of IORs; col. 43, lines 45 – 48].

21. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of serializing an object reference and converting a serialized interoperable object reference back to an object reference as taught Kukura



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to the invention of Quirt because this formats the request message in such a way that all the interconnected computers can understand and respond to the request message [col. 1, lines 29 – 45 of Kukura].

22. As to claim 2, Quirt teaches the collecting step and the forwarding step are performed in a request application server [col. 8, lines 22 – 34].

23. As to claim 3, Quirt teaches the locating step, the serializing step, the attaching step, and the redirecting step are performed in a source application server [col. 8, lines 49 – 62].

24. As to claim 4, Quirt teaches the converting step and the binding step are performed in a destination application server [col. 8, lines 49 – 62].

25. As to claim 5, Quirt teaches the collecting step is performed using a Java server page [col. 4, lines 1 – 5].

26. As to claims 6 and 7, Quirt teaches the request is a POST request and the request is sent using hypertext transport protocol [col. 11, lines 52 – 61].

27. As to claim 8, Quirt teaches the request includes an identification of a source, a source name space path, and identification of a destination [registration message 308

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includes a scope parameter indicating that the registration is to be performed at a central level (in the Central Name Service, in the Local Name Service 302 and in the associated Cluster Name Service); col. 8, lines 40 – 63], and a destination name space path used to bind the object reference [registration message also includes a parameter identifying the scope of registration of its reference. This parameter may indicate if the software object reference must be registered on every node in a given cluster or every node in the system; col. 8, lines 22 – 34].

28. As to claim 10, Quirt as modified teaches serializing the object reference prior to sending the object reference to the destination [col. 43, lines 45 – 48 of Kukura].

29. As to claim 14, this is a system claim that corresponds to method claim 1; note the rejection to claim 1 above, which also meets this system claim. Examiner notes that a bus system, a communications unit connected to the bus system, and a memory connected to the bus system are inherent to a computer system.

30. As to claims 16 – 23, these are system claims that correspond to method claims 1 – 8; note the rejection to claims 1 – 8 above, which also meet these system claims.

31. As to claim 25, this is a system claim that corresponds to method claim 10; note the rejection to claim 10 above, which also meets this system claim.

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32. As to claim 29, this is a product claim that corresponds to method claim 1; note the rejection to claim 1 above, which also meets this product claim.

### ***Conclusion***

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,014,700 to Bainbridge et al. teaches workload management in a client-server network with distributed objects.

U.S. Patent No. 6,044,379 to Callsen teaches implementing multiple storage mechanism for names services associated with a computer system.

U.S. Patent No. 6,438,590 to Gartner et al. teaches a preferential naming service.

U.S. Patent No. 6,578,050 to Daggubati et al. teaches implementing persistence in name services using a directory service.

U.S. Patent No. 6,751,646 to Chow et al. teaches CORBA compliant name services incorporating load balancing features.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen  
Examiner  
Art Unit 2126

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